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(54) **METHOD FOR MEASURING THICKNESS OF  
COMPOSITE MATERIAL MADE OF ZIRCONIUM  
ALLOY AND ZIRCONIUM**

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(57) Abstract:

**PURPOSE:** To measure the thickness of Zr accurately and surely by measuring the thickness of a composite material made of Zr alloy and Zr by using ultrasonic wave having a prescribed frequency and a line focus type probe.

**CONSTITUTION:** A tube material 1 consisting of an outer layer material 1a made of Zr alloy and an inner layer material 1b made of Zr is dipped in a fluid medium 2, and the ultrasonic wave having 20W10CMHz frequencies is emitted from the line focus type probe 3. The reflected wave is received by the probe 3, and a sending echo T is displayed on a cathode-ray tube 5 of an ultrasonic inspector 4. The ultrasonic wave is reflected at the interface between the material 1a and the medium 2, that between the material 1a and 1b, that between the material 1b and the medium 2, and respective echoes are generated. The thicknesses of the materials 1a and 1b are measured accurately and surely from time intervals between respective echoes.

